HUNTERS POINT NAVAL SHIPYARD BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING NOTES February 27, 2014

These notes summarize the meeting of the Navy Base Realignment and Closure (BRAC) Cleanup Team (BCT) for Hunters Point Naval Shipyard (HPNS). The meeting was held at 10:00 a.m. on February 27, 2014 at the CH2M HILL's offices in Oakland, California.

I. Introductions, Meeting Guidelines, Agenda Review, and Meeting Minutes

Keith Forman (Navy) began with introductions; participants are listed on the last pages of these notes. The action items from January were completed.

II. Radiological Program Update (Chris Yantos, Navy)

- Parcel C Phase II project has removed approximately 14,000 linear feet of sanitary and storm sewer lines.
- At Parcel C ship berths, surveys are complete for soil Survey Units 2, 3, 6, 7, and 9; characterization sampling and remediation are ongoing at Survey Units 1 and 4 and Survey Units 5 and 8 are awaiting definitive data. Concrete Survey Units 10-13 surveys are ongoing.
- At Building 253, all of the ventilation system is removed and surveyed. At Building 211, 85% of the wooden extension is surveyed and screened. At both buildings, 63% of floors are surveyed.
- The Navy began work on Parcel E sanitary and storm drain removals in January 2014. To date, approximately 3,200 linear feet of sanitary and storm sewer lines have been removed.
- The Navy is working on the Draft Parcel C North Pier Final Status Survey (FSS) Report and Draft Parcel E Former Building 707 Triangle, Former Shacks 79/80, and 500 Series FSS Reports.
- The Final Parcel D-1 Phase 1 Removal Action Completion Report (RACR) was issued on January 14, 2014.

III. IR-03 Pilot Study Update (Danielle Janda, Navy)

- The Navy gave an update on the in-situ thermal remediation (ISTR) treatment system and noted they are heating the treated water prior to reinjection, which is an innovative approach to conserving energy in the system.
- The system has been effective at pulling out both dense non-aqueous phase liquid (DNAPL) and light non-aqueous phase liquid (LNAPL).

- Temperatures in portions of the system reached 30-60°C during the first week of operation and 70-90°C by the third week of operation, subsequently, some of the heater wells have been shut down in select areas. The Navy believes that reinjection of the warm treated water is allowing the system to retain more heat.
- Approximately 370 gallons of NAPL have been extracted since February 4, 2014 with approximately 90% of this being LNAPL.

IV. Parcel C Remedial Action Update (Tony Konzen, Navy)

- As of February 2014, approximately 26,000 bank cubic yards (bcy) have been excavated and stockpiled.
- At RU-C5, Plume C5-2: Groundwater monitoring well IR06MW67A was sampled to verify the plume location prior to commencement of in-situ bioremediation (ISB) injections. The well is located outside the known plume area and has volatile organic compounds (VOCs) levels above ISB treatment criteria. The well was re-sampled in February 2014 and results were confirmed. Additional characterization is required of the groundwater plume and further bioremediation might be warranted.
- Soil vapor extraction (SVE) systems have been installed in Areas 1, 3, 6 and 7; Area 8 installation is partially complete; Areas 6 and 7 have completed their startup tests; and startup tests are just beginning at Area 3.
- The Navy is recommending further characterization (and possible bio-remediation) of SVE Areas 4 and 5 because of remaining soil gas and groundwater concentrations above cleanup goals.
- The Navy will complete the bioremediation and zero-valent iron injections in May 2014 and post-injection groundwater sampling will begin in March 2014.
- The Navy also gave an update on the excavations (20A-1 and 20B-1)at Buildings 251 and 258 which includes completion of the shoring at Building 251 and completion of asbestos abatement activities and canopy demolition activities at Building 258.
- At groundwater plume C2-1, post-injection results were reduced for VOCs in at least one of the sampling locations.
- At groundwater plume C2-2, post-injection results indicated that concentrations of carbon tetrachloride were reduced from initial concentrations at 5 of 7 locations and chloroform concentrations were reduced at 4 of 6 locations.
- Monitoring well IR28MW190F at Building 258 has concentrations of carbon tetrachloride exceeding the cleanup goal and is in an area not designated for groundwater treatment. Excavation 20A-1 is adjacent to this monitoring well and at this time the Navy recommends continued monitoring of the well following the excavation.

• Installation of the SVE systems at C2-1 and C4-1 will begin in April 2014.

V. Community Involvement Update (Keith Forman, Navy)

- The Navy distributed the outreach calendar via email and at the February meeting. Additionally, the Parcel E-2 factsheet discussing the first community meeting in December 2013 was available at the February community meeting.
- The community meeting was held on February 26, 2014 and was part 2 of the Parcel E-2 remedial design meetings.
- The Navy will work to finalize the 2014 Annual Update and Fourth Quarterly Progress Report and will begin work on the second Parcel E-2 Remedial Design factsheet.
- The next community meeting will be in April 2014 at the Bayview YMCA and will discuss Parcel E-2.

VI. Action Items/Future Meetings (Keith Forman, Navy)

New Action Items:

- The Navy will report back to the BCT on the Parcel UC-1 and UC-2 soil gas investigation addendum and how that information will be incorporated into the RACR.
- The Navy will populate the schedule summary for Parcel UC-3 documents.

Next meetings:

- March 27, 2014 BCT meeting at the HPNS Site Trailers, San Francisco, California
- April 24, 2014 BCT meeting at CH2M HILL's office, Oakland, California

Meeting participants:

Jeff Austin, Geosyntec Tracy Jue, CDPH*

Karla Brasaemle, TechLaw Tim Kemper, CBNI

Amy Brownell, City of SF Anthony Konzen, Navy*

Camilo Colorado, Navy ROICC* Tina Low, Water Board

Jamie Egan, KCH Leslie Lundgren, KCH

Mitra Fattahipour, Insight* Tamzen MacBeth, CDM Smith*

Yvonne Fong, USEPA* Ulrika Messer, CBNI*

Keith Forman, Navy Ryan Miya, DTSC

Catherine Haran, Navy Tim Mower, Tetra Tech ECI

Bob Hunt, Alliance Compliance Reginald Paulding, Navy*

Mahbub Hussain, Navy* Christina Rain, Treadwell and Rollo/Langan

Danielle Janda, Navy* Lara Urizar, Navy

Eric Johansen, CE2-Kleinfelder Chris Yantos, Navy*

^{*} Indicates attendee participated via telephone